ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09 534,8618
ATTN: NEW RULES CASES	: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001



1600

```
TATE: 01/19/2003
                    RAW SEQUENCE LISTING
                                                            TIME: 10:46:58 > NOW ON P. 5
                    HATENT APPLICATION: US/09/534,861B
                    Input Set : A:\15313SEQrev.txt
                    Output Set: N:\CRF4\01172003\I534861B.raw
      3 <110 AFFLICANT: Smeekens, J.C.M.
             Ebskamp, Michael
     4
             Geerts, Hendrikis
             Weisbeek, Petrus
      9 <120 - TITLE OF INVENTION: Production of Oligosaccharides in Transgenic Plants
     10 <130 FILE REFERENCE: ARNO-1-15313
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/534,861B
     13 <141 - CURRENT FILING DATE: 2000-03-24
     15 <150. PRIOR APPLICATION NUMBER: US 09/019,385
     16 <151 - PRIOR FILING DATE: 1998-02-08
     18 <150% PRIOR APPLICATION NUMBER: US 08/479,470
     21 <150 - PRIOR APPLICATION NUMBER: NL 1000064
    22 <151: PRIOR FILING DATE: 1995-04-05
     24 <150% PRICE APPLICATION NUMBER: NL 9401140
     25 K151: PRIOR FILING DATE: 1994-08-07
     27 k1600 NUMBER OF SEQ ID NOS: 12
     29 <1700 SOFTWARE: Fatentin version 3.0
     31 <210: SEQ ID NO: 1
     32 <211: LENGIH: 2094
     33 <212: TYPE: DNA
     34 <213: ORGANISM: Barley
     36 <220: FEATURE:
     37 <221: NAME/KEY: CDS
     38 <222 LOCATION: (46)..(1923)
    40 <400: SEQUENCE: 1
    41 gotoaquato taccamadoo totoggagtt gacgagoggo googo atg ggg tom cac
                                                         Met Gly Ser His
    43
                                                                             105
    45 ago aag oos oog sta oog tad god tad aag dog dig ood tog gad god
    46 Gly Lys Prc Pro Leu Pro Tyr Ala Tyr Lys Pro Leu Pro Ser Asp Ala
    47 5
                                               15
    49 god gad ggt aag dgg acd ggd tgd atg agg tgg tod gdg tgt gdd ach
    50 Ala Asp Gly Lys Arg Thr Gly Cys Met Arg Trp Ser Ala Cys Ala Thr
    53 gig cig acq god ing god aig gog gig gig gig gid gid god acg did
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FATENT ABBILITATION: US/09/534,861B

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0 Met Tyr Tyr Ard Gly Trp Tyr His Met The Tyr Gln Tyr Ash Fro Val	
110	
3 ggo abo gab tgg gab gab ggb atg gag tạg ggb bab gbb gtg tbb bượ	441
4 Gly Thr Asp Trp Asp Asp Gly Met Glu Trp Gly His Ala Val Ser Arg	
5 120 125 130	
Thaab outhighe caalingg ego aboreholder atclight atgrigtig got gad bay	489
S Asn Leu Val Gln Trp Arg Thr Leu Pro Ile Ala Met Val Ala Asp Gln	
9 135 140 145	
I tgg tao gan ato ito gga gto one tog ggo too atg abg gtg ota boo	5.37
2 Trp Tyr Asp Ile Leu Gly Val Leu Ser Gly Ser Met Thr Val Leu Pro	
3 150 155 160	F 0 F
5 aac ggg acg gto atc atg atc tac acg ggc gcc acc aac gcc too gcc	585
6 Asn Gly Thr Val Ile Met Ile Tyr Thr Gly Ala Thr Asn Ala Ser Ala	
7 165 170 175 180	633
9 gtg gag gtd dag tgd atd god add dog gdd gad dod aad gad dod otd	633
00 Val Glu Val Gln Cys Ile Ala Thr Pro Ala Asp Pro Asn Asp Pro Leu 195 - 195 - 196	
is to ego egg tigh acc aag cac edo gen aac een gio ato ijg teg eeg	681
4 Leu Ard Ard Tro Thr Lys His Fro Ala Ash Pro Val Ile Tro Ser Fro	OOI
5 200 210	
Goog ggg gto ggb aec aag gat the oga gae deg atg acc gbc tgg tac	72.9
% Pro Gly Val Gly Thr Lys Asp The Arg Asp Pro Met Thr Ala Trp Tyr	
9 215 220 225	
01 gao gag too gao gag awa tgg bgo abo oto oto ggg too aag gab gab	777
02 Asp Glu Ser Asp Glu Thr Trp Arg Thr Leu Leu Gly Ser Lys Asp Asp	
03 230 235 240	
05 cad gad ggd dad dad gad ggd atd god atg atg tad aag add aag gad -	825
06 His Asp Gly His His Asp Gly Ile Ala Met Met Tyr Lys Thr Lys Asp	
07 245 250 255 260	
09 the etc aac tac gag but atc deg ggs atc tig cac egg gig gig egs \sim	873
10 Phe Leu Asr Tyr Glu Leu Ile Pro Gly Ile Leu His Arg Val Val Arg	
11 265 270 275	
13 acc ggc gag tgg gag tgc atc gac tto tac coc gtc ggc cgg aga agc	921
14 Thr Gly Glu Trp Glu Cys Ile Asp Phe Tyr Fro Val Gly Arg Arg Ser	
15 280 295 290	0.00
17 age gad aad tog tog gag atg etg dad gtg tig aag geg age atg gad -	969
TO Paul Tau Tau Paul Paul Paul Piu Mat Tau Mir Mir Nai Tuu Tua Tia Sia Sau Mat Tau	
18 Ser Asp Ash Ser Ser Glu Met Leu His Val Leu Lys Ala Ser Met Asp	
19 2.95 300 305	1017
19	1017
19 295 300 305 21 gad gaa dgg dad gad tad tad tog dtg ggd adg tad gad tog gog gdd 22 Asp Glu Arg His Asp Tyr Tyr Ser Leu Gly Thr Tyr Asp Ser Ala Ala	1017
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19 295 300 305 21 gad gaalogg dad gad tad tad tog dtg ggd adg tad gad tog god gdd 22 Asp Glu Arg His Asp Tyr Tyr Ser Leu Gly Thr Tyr Asp Ser Ala Ala 23 310 315 320	

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FATENT AFFILMATION: US/09/534,861B

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134	Ala	Lys	ASII	Arg	Arg		1,000	$N_1 \sim 1$	Gly	Tyr	Val.	Gly	314	Val	Asp	2422	
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143		390				-	395	•				400				•	
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		att	acc	att	aac	act	gge	tcc	atc	ato	cat	atc	CCG	ata	cac	caā	1353
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151					425		~ = <u>1</u>			430					435		
	aac	act	had	act		cat	geg	gag	acc		tta	cac	ctt	gat	act	ticc	1401
							Ala										
185	~ ± y			440	*** 3				445	~				450			
	acc	ata	ant.		ata	aac	gag	acc	gat	ata	aac	tac	aac	tac	aat	agc	1449
							Glu										
159	,,,,	• (4.2	455					4.60	1-		1	- 1	465	1			
	adc	aan		ant	at+	aac	ege	aac	aca	ct a	aac	oac	tto	aac	atio	ctc	1497
							Arg										
163		470	~ <u>,</u>				475				2	430		.2			
	ate		acc	gaa	aat.	uac	aga	::st	aac	gag	caa	aca	aca	ata	tac	tto	1545
166	Val	[.eu	Ala	Ala	Glv	Asp	Arg	Ara	31v	Ğlü	Gln	Thr	Ala	Val	Tvr	Fhe	
	485	2.75	, , , , ,		1	490	9				495				1	500	
		ata	tat	agg	ggic	ct t	gac	dda	aac	ata	cac	acc	add	ttc	tac	caa	1593
170	Tyr	Val	Ser	Ara	Glv	Leu	Åsp	Glv	Glv	Leu	His	Thr	Ser	Phe	Cvs	Gln	
171	- 1 -			5	505		1	- 1	-	510					515		
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174	Asp	Glu	Leu	Arg	Ser	Ser	Arg	Āla	Lvs	Āsp	Val	Thr	Lvš	Arg	Val	ile	
175	110 5	52.3		520			7		525	1			.2	530			
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							Leu										
179	~~ ,		535					540					545		_		
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							Val										
183		550					555		2		1	560					
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							Tyr										
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							Ala										
141		- 1 -	****		1.41					5.4				-	1, 45	**	
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				D NO						9 0 00 00					_		20.7
	9 <201> LENGTH: 626																
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.213	3 <400> SEQUENCE: 2																
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220				20					2.5					30			
		Суз		Thr	Vāl	Leu	Thr		Ser	Ala	Met	Ala		Val	Val	Val	
224			35					40					45				
			Thr	Leu	Leu	Ala		Leu	Arg	Met	Glu		Ala	Val	Asp	Glu	
	-7.3					- ·	55	_	_			60			~ 1	_	
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232		3	C *	Gly	T	70	E.b.o	(1)	m.t		75	71	Т	N	Car	80	
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	Tvr	Asn	Erc	Val	Glv	Thr	Asp	Tro		Asp	Glv	Met	Glu		Glv	His	
	- 2		115		1			120			I		125	1	1		
			Ser	Arg	Asn	Leu	Val	Gln	Trp	Ara	Thr	Leu	Pro	::e	Ala	Met.	
348		130		-			135		-	_		140					
	Val	Ala	Asp	Gln	Trp	Туг	Asp	Πe	Leu	Gly	Val	Leu	Ser	Gly	Ser	Met	
31.3						150					155					160	
	Thr	Val	Leu	Pro		Gly	Thr	Val	Ile	Met	Hle	Tyr	Thr	Gly	Ala	Thr	
256					165					170					175		
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260				180	_	_	_	_	185			_		190			
	Asn	Asp		Leu	Leu	Arg	Arg		Thr	Lys	His	Pro		Asn	Pro	Val	
264	11.	m	1.95	5	F	C1	17 7	200	m1	7	70	ENI-	205	7	Б		
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1-7 Bly Arg Arg Ser Ser Asp Ash Ser Cer Glo Met Leo His Wal Leo Lys
                            2.45
.. .. ..
191 Ala Cer Med Asp Asp Sla Arr His Asp Tyr Tyr Cer Lea Sly The Tyr
   3.5
290 Asp Jor Ala Ala Ash Thr Trp Thr Fro Ille Asp Fr. Old Led Asp Led
                    325
299 Gly Ile Gly Leu Arg Tyr Asp Trp Gly Lys Fhe Tyr Ala Ser Thr Ser
                                    345
   The Tyr Asp Fro Ala Lys Ash Arg Arg Val Leu Met Gly Tyr Val Gly
                                360
                                                    365
   Glu Val Asp Ser Lys Arg Ala Asp Val Val Lys Gly Trp Ala Ser Ile
311 Gln Ser Val Fro Arg Thr Val Ala Leu Asp Glu Lys Thr Arg Thr Ash
                                            395
312 385
                        390
315 leu Leu Leu Trp Pro Val Glu Glu Ile Glu Thr Leu Arg Leu Ass Ala
                    405
                                        410
                                                            415
319 Thr Glu Leu Thr Asp Val Thr Ile Asn Thr Gly Ser Val Ile His Ile
                420
                                    425
   Pro Leu Arg Gln Gly Thr His Ala Arg His Ala Glu Ala Ser Phe His
324
           435
                                440
327 Leu Asp Ala Ser Ala Val Ala Ala Leu Asn Glu Ala Asp Val Gly Tyr
                            455
                                                460
331 Ash Cys Ser Ser Ser Gly Gly Ala Val Ash Arg Gly Ala Leu Gly Fro
                                            475
332 465
                        470
335 Fhe Gly Leu Leu Vai Leu Ala Ala Gly Asp Arg Arg Gly Glu Gir Thr
                                        490
                    485
35% Ala Val Tyr Fhe Tyr Val Ser Arg Gly Leu Asp Gly Gly Leu His Thr
                                    505
               500
                                                        510
34% Ser Phe Cys Gln Asp Glu Leu Arg Ser Ser Arg Ala Lys Asp Val Thr
                                520
544
34% Lys Arg Val lie Gly Ser Thr Val Fro Val Leu Asp Gly Giu Ala Leu
      530
                            535
348
                                                540
35: Ser Met Arg Val Leu Val Asp His Ser Ile Val Gln Gly Fhe Asp Met
                        550
                                            555
352 545
355 Gly Gly Arg Thr Thr Met Thr Ser Arg Val Tyr Pro Met Glu Ser Tyr
356
                    565
                                        570
359 Glm Glu Ala Arg Val Tyr Leu Phe Asn Asn Ala Thr Gly Ala Ser Val
360 580
                                    585
                                                        590
363 Thr Ala Glu Arg Leu Val Väl His Glu Met Asp Ser Ala His Asn Gln
                               600
   Leu Ser Ash Glu Asp Asp Gly Met Tyr Leu His Gln Val Leu Glu Ser
   610
                            615
368
371 Arg His
372 625
375 k210> SEQ ID No: 3
                                      - Mush of response, See error summany sheet
376 <211> LENGTH: 30
370 k2125 TYPE: MMA 🚐
to- kliss (ROAMIKM: (Synthetis INA
                                           item 10
PHILAGONAL PROPERTY.
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RAW SEQUENCE LISTING ERROR SUMMARY HATELY AFFILE ATTICLE: US/09/534,861B

Input Jet : A:\15313SEQrev.txt

or: :: N:\CRF4\01172003\I534861B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Maa Fos. 6,12,15
Seq#:12; Maa Fos. 5,7,%,11,13

VERIFICATION SUMMARY

1ATE: 1 17 . 15 TIME: 1 :4e:5/ HATENT APPLICATION: US/09/534,861B

light Def : A:\15313SEQrev.txt

ungut Set: N:\CRF4\01172003\I534861B.raw

L:12 M: 01 O: Correct Application Number differs, Replaced Correct Application Number L:401 M::41 W: 4* "n" o: "Maa" used, for SF, 10#:11 after p s.: 11:440 M::41 W: 4*0 "n" or "Maa" used, for SE, 10#:12 after p s.: